



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,190	12/14/2000	Tetsuo Shibuya	14043 (JP919990270US1)	9159

7590

03/25/2003

SCULLY, SCOTT, MURPHY & PRESSER  
400 Garden City Plaza  
Garden City, NY 11530

EXAMINER

LY, CHEYNE D

ART UNIT	PAPER NUMBER
----------	--------------

1631

DATE MAILED: 03/25/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/737,190

Applicant(s)

SHIBUYA, TETSUO

Examiner

Cheyne D Ly

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 2/10/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 3-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-11 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. Applicant's election without traversal of Group II, claims 2-8. Specie B (Not utilizing a suffix tree), in Paper No. 13, filed February 10, 2003, is acknowledged.
2. Claims 3-8 are withdrawn due to being directed to Specie A-utilizing a suffix tree which is not an elected specie. Claims 1 and 9-11 are also withdrawn due to being directed to a group that is not of the elected group.
3. Claim 2 is examined on the merits.

### **PRIORITY**

4. It is acknowledged that Applicant claims priority to a Japanese priority document. It is noted that priority may be granted to this priority document, if applicant supplies a certified English translation for consideration.

### **IDS**

5. Documents by Hasidume et al. (1993 and 1995) listed in Paper No.11, filed May 9, 2002, have not been considered. The instant application does not contain an English-language translation to the foreign document, Hasidume et al. (1995), as is required for consideration for a reference. For a document published in a non-English-language, a copy of the translation of the document to the English-language is required. (See MPEP § 609). Further, Hasidume et al. (1993) is listed on the PTO-1449 form, however, a copy of the reference is not present in the instant application.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1631

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 2, lines 11-12, is vague and indefinite because it has embodiments of claim 1 which is not of the elected claims. It is unclear how the active steps of changing the target array on lines 11-12 is achieved when claim 1 is not one of the elected claims. Clarification of the metes and bounds are required.

9. Claim 2, line 1, the preamble recites a method for analyzing the structure of an array while the body of the claim recites steps for changing a variable that is included in a target array. It is unclear whether the array, which is embodied in this method claim, is an apparatus such as a microarray, a data structure or the data representing the elements of the array apparatus. Clarification of the metes and bounds is required.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claim 2 is rejected under 35 U.S.C. 102(a) as being clearly anticipated by Jensen et al. (April 2000).

12. Jensen et al. discloses a method for functional annotation associated with each gene or ORF was converted into a pseudo-sequence by removal of all non-alphanumeric characters... For each of the approximately 10 000 words in the dictionary, the set of 500 bp upstream regions was

Art Unit: 1631

divided into a corresponding positive set consisting of the sequences containing the word in their functional annotation and negative set not containing the word (Page 327, column 2, lines 30-37 to Page 328, column 1, lines 1-3). "The two strands are treated separately when counting patterns. By doing so we gain sensitivity on patterns that show strong preference for one orientation" (Page 327, column 1, lines 43-47). "In the first sweep, the number of sequences containing each pattern is stored in one counter. During the second sweep, the number of these sequences yet encountered and the highest value of  $|N_{x_i} - n_i|$  so are stored in two other counters" (Page 328, column 1, lines 33-37). Table 3 (Page 330) discloses the converted data from three microarray experiments and the array data is analyzed respective of each other. The above disclosures anticipate the limitations of claim 2.

### CONCLUSION

13. NO CLAIM IS ALLOWED.

14. Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (see 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

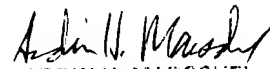
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (703) 308-3880. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

Art Unit: 1631

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.

17. Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner, Tina Plunkett, whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

C. Dune Ly  
3/23/03

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER